

Original Research Paper

ENT

CLINICOPATHOLOGICAL STUDY OF CERVICAL LYMPHADENOPATHY WITH EMPHASIS ON FINE NEEDLE ASPIRATION CYTOLOGY

Dr Miklu Senapati* Consultant, Department of Otolaryngology(ENT),GNRC, Guwahati, Assam. *Corresponding Author

ABSTRACT Introduction: A swelling in the cervical region can be a diagnostic challenge. Despite advances in modern technology accurate diagnosis of cause of cervical adenopathy remains a challenge. Fine Needle Aspiration Cytology (FNAC) is an important tool for the diagnosis of lymph node lesions.

Materials and methods: A retrospective hospital based study was done in which a total of 47 cases of cervical lymphadenopathy were included.

Results: Maximum number of cases was observed in age group 21-30 years and there were 28 male and 19 female cases in our study. Out of 47 cases, 16 cases were of non specific reactive lymphadenitis, 10 cases of granulomatous, 5 cases of Non Hodgkin lymphoma, 2 cases of Hodgkin lymphoma and 14 metastatic lesion.

Conclusion: We conclude that cervical lymphadenopathy can have varied manifestation from non-neoplastic to neoplastic condition and FNAC is a simple, safe, minimally invasive and reliable technique for preliminary evaluation of lymphadenopathy.

KEYWORDS : Cervical lymphadenopathy, FNAC, reactive, lymphoma.

INTRODUCTION:

Lymphadenopathy is a commonly encountered clinical problem which has a multitude of causes. The commonest cause of lymphadenopathy is a non-specific reactive hyperplasia in which the underlying etiology is infrequently found (probably an asymptomatic inflammatory process).¹ In general practice, less than 1% of patients with lymphaden opathy have a malignant process.²Although surgical excision of a palpable peripheral node is relatively simple, vicinity to other anatomical structures in the neck sometimes causes problems. The procedure does require anesthesia, strict sterility and theater time, and it may leave a scar. To avoid surgery, patients are usually watched for some time before a decision of open biopsy is taken, unless the clinical suspicion of malignancy is strong. Fine needle biopsy (FNB) offers the alternative of an immediate, preliminary, although not always specific diagnosis with little trauma and cost, thus providing ample information for further management.³

MATERIALS AND METHODS:

A retrospective study was done in department of ENT of our hospital for a period of one year. A total of fourty seven cases of palpable cervical lymph node lesions, attending the outpatient and inpatient wards of ENT department of our hospital were included in the study. The cases were thoroughly interrogated, clinically examined and relevant investigations done. FNAC procedure was explained to the patient and patient was placed in a comfortable position. They were then subjected to fine needle aspiration cytology. Aspirations were carried out with 21 or 22guage needles of varying lengths with 10 ml syringes in a syringe holder after careful clinical examination of the lymph node. The samples were placed on a glass slide and smears were made by inverting second glass slide over the drop and as it spreads, pulling the slides apart horizontally or vertically. The aspirations were air dried, stained with the May Grunwald Giemsa method and examined microscopically. The cases were divided into following groups: Reactive hyperplasia, Granulomatous lymphadenitis including tubercular, lymphoma comprising of non Hodgkin and hodgkin's lymphoma, metastatic malignancy.

RESULTS AND OBSERVATIONS:

Maximum number of cases was observed in age group 21-30 years and there were 28 male and 19 female cases in our study as shown in Table 1.

TABLE - 1 AGE AND SEX DISTRIBUTION OF SUBJECTS

AGE	MALE	FEMALE
01-10 Years	03	01
11-20 Years	02	03
21-30 Years	09	07
31-40Years	02	03
41-50Years	04	02
51-60 Years	03	02
61-70 Years	04	01
71-80 Years	01	00
Total	28	19

Out of 47 cases, 16 cases were of non specific reactive lymphadenitis, 10 cases of granulomatous,5 cases of non Hodgkin lymphoma,2 cases of Hodgkin lymphoma and 14 metastatic lesion as shown in table 2.

TABLE - 2 CYTOLOGICAL DIAGNOSIS

Cytological diagnosis	CASES	PERCENTAGE
Non specificReactive	16	34.04%
Granulomatous	10	21.2%
Non Hodgkin lymphoma	05	10.6%
Hodgkin lymphoma	02	4.25%
Metastatic	14	29.7%
TOTAL	47	100%

Most common cause of lymphadenopathy was found to be non specific reactive lymphadenitis followed by metastatic malignancy. Among the metastatic cases 09 cases were of squamous cell carcinoma and 05 cases of adenocarcinoma.



Fig 1:Cytology of granulomatous lesion.

DISCUSSION:

FNAC of cervical lymph nodes provides a great opportunity to explore the myriad lesions that involve these lymph nodes. Since infections from oral cavity, ear,nose and paranasal sinuses drain into these nodes, reactive lymphoid

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hyperplasia is a common finding.⁴ Most common lesion in our study was non specific reactive lymphadenitis which was in accordance with the study done by Kataria P et al where reactive lymphadenitis was the most common cause of cervical lymphadenopathy.⁵This was in contrast to the study done by Shakera et al where tuberculous lymphadenitis was the most common finding.⁴ Among the metastatic cases 09 cases were of squamous cell carcinoma and 05 cases of adenocarcinoma in our study.This was in accordance to the study done by Shakera N Baji et al where squamous cell carcinoma wasthe commonest metastatic lesion.⁴

CONCLUSION:

FNAC is a reliable tool for preliminary diagnosis of lymphadenopathy. It is simple, safe and time saving method, no anesthesia is required and operative risk of surgical biopsy could be avoided and can be repeated as and when necessary.

REFERENCES:

- Svante R Orell, Gregory F Sterrett. Orell&Sterrett's Fine Needle Aspiration Cytology. FIFTH EDITION.
- Australian Cancer Network Diagnosis and Management of Lymphoma Guidelines Working Party. Guidelines for the Diagnosis and Management of Lymphoma. Sydney: The Cancer Council Australia and Australian Cancer Network; 2005. p. 136.
- Gupta AK, Nayar M, Chandra M. Reliability and limitations of fine needle aspiration cytology of lymphadenopathies: an analysis of 1,261 cases. Acta Cytol 1991;35:777–83
- Shakera N Baji, Vaishali Anand, Richa Sharma, Kunal S Deore, Mital Chokshi. Analysis of FNAC of cervical lymph nodes: Experience over a two years period. International journal of medical science and public health. 2014; (3)5
- Kataria P.Sachdeva M.Navneet Kumar Singh.FNAC as a diagnostic tool for the diagnosis of cervical lymphadenopathy. Bull.Environ. Pharmacol. Life.Sci.2012;1(8):72-75